CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 HIGUERA STREET, SUITE 200
SAN LUIS OBISPO, CALIFORNIA 93401-5427

ORDER NO. 94-72

43-AA-0004

CLOSURE WASTE DISCHARGE REQUIREMENTS
FOR
PACHECO PASS CLASS III LANDFILL
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, Central Coast Region (hereafter Board), finds that:

1. The Gilroy Garbage Company, South Valley Refuse Disposal, Inc. and Mr. and Mrs. F. L. Furtado (hereafter collectively referred to as "Discharger") own adjacent contiguous parcels of land which make up the Pacheco Pass Class III and inert waste Landfill (hereafter "Landfill").

2. The 136 acre Landfill is located 7 miles east of the city of Gilroy at 3665 Pacheco Pass Road. It is located in Section 12, Township 11S, Range 4E, MDB&E, as shown in Attachment "1" included as part of this Order. The landfill is comprised of three parcels: Parcel 1, Parcel 2, and Parcel 3 (designated as the expansion area in the January 1984, Site Investigation and Site Development Study, Pacheco Pass Sanitary Landfill Expansion report), as shown in Attachment "2", included as part of this Order. Parcel 1 is the original 31-acre landfill parcel; Parcel 2 is a 45-acre undeveloped portion of the permitted site; and Parcel 3 (1984 Expansion Area) is 60 acres. Those modules identified as modules A, B, C, and D are shown in Attachment "2". The facility boundary includes for the purposes of environmental monitoring and control enhancement, the 31-acre easement dedicated by Mr. and Mrs F. L. Furtado, adjacent to and southwest of the Parcel 1 landfill. Although they are presently separate, contiguous waste management units, development plans indicate that Module A and Parcel 1 will be combined into a single Waste Management Unit containing municipal solid waste. Modules B, C, and D are designated for inert waste.

3. These Waste Discharge Requirements (Requirements) are being revised/updated to incorporate criteria currently applicable to solid waste disposal sites, particularly:

   a. criteria established in California Code of Regulations, Title 23, Division 3, Chapter 15 (Chapter 15), including Article 5, pertaining to landfill water quality monitoring and response programs, as amended July 1, 1991;

   b. criteria established in 40 CFR Parts 257 and 258 Solid Waste Facility Disposal Criteria, Final Rule (Known as "Subtitle D"), as promulgated October 9, 1991.

4. This Order revises/updates and replaces Order No. 90-34, as adopted on February 16, 1990. Order No. 90-34 regulated all waste discharges to the Landfill and all ground water cleanup operations. Implementation of applicable revised Article 5 monitoring requirements and various other pertinent landfill changes, including compliance with Federal Subtitle D landfill regulations, will bring the Landfill into compliance with current landfill requirements.

Physical Description: Geology

5. Land use within 1000 feet of the Landfill is for cattle grazing, farmland, and open space.

6. Complex geologic conditions characterize the site and vicinity of the landfill. Two secondary fault traces of the Calaveras Fault system mapped in Module A dip steeply to the northeast and toward the main fault trace. These traces effectively divide sediments of the Santa Clara Formation into eastern, central, and western fault blocks. Sediments of the eastern and central fault blocks

generally dip to the west. Sediments of the western fault block generally dip to the east. The Santa Clara Formation was originally deposited in an alluvial fan environment, and is composed of discontinuous lenticular irregularly bedded claystone, siltstone, sandstone and conglomerate.

7. The Discharger's data demonstrate natural geologic materials between the base of the Waste Management Unit and ground water cannot ensure degradation of beneficial uses of ground water beneath or adjacent to the Landfill will not occur.

8. The soil within one mile of the Landfill consists of loams and gravelly loams with lesser amounts of clay. The three predominant soil series are the Altamont, the Azule, and the Gaviota. The southern corner of the site encompassing the majority of the active landfill area is underlain by Altamont clay. The central portion of the site including the northeastern strip of the active landfill area is underlain by Azule clay loam. The narrow strip of soil along the northeast border of the site is composed of Azule clay loam.

9. The landfill is located along the southwest zone of the Calaveras fault. The main fault trace is located northeast of the existing Landfill area and crosses the northeast corner of the 1984 expansion area. Two secondary traces have been mapped through both the existing landfill area and the 1984 landfill expansion area. The Calaveras fault is capable of generating earthquakes up to magnitude 7.0 with ground accelerations around 0.69g. The nearby San Andreas is considered to be capable of generating earthquakes up to magnitude 8.3 with ground accelerations of 0.47g.

Water Resources

10. The Landfill lies within the Pacheco-Santa Ana Creek Hydrogeologic Area of the Pajaro River Hydrologic Unit. Surface drainage could potentially reach the Pajaro River. The Landfill lies outside the Pajaro River 100-year floodplain.

11. The Santa Clara Valley has a Mediterranean climate with mild wet winters and warm dry summers. Average annual precipitation is approximately 16 inches per year. Precipitation is seasonal with most falling between November and March.

12. Within each fault block the ground water occurs in the more permeable beds of the Santa Clara formation under both confined and unconfined conditions. The depth to ground water in the western fault block ranges from 30 to 100 feet. The depth to ground water in the central fault block ranges from 40 to 50 feet. The depth in the eastern fault block has not been determined. The ground water flow conditions are complex due to the geologic conditions beneath the Landfill. Permeabilities range from $1x10^{-7}$ cm/sec in the silty sandstone, sandy claystone, and clayey sandstone to greater than $1x10^{-4}$ cm/sec in the sandstone and conglomerate units. Ground water flow occurs within the individual fault blocks and is controlled by stratigraphy and geologic structure. The bounding faults of each fault block appear to act as barriers to flow across the fault.

13. There are 36 wells within one mile of the site. Three wells northeast of the site are drilled in the sediments of the Diablo Range and used for livestock. The remaining wells are in the Santa Clara Valley and penetrate alluvium and the underlying Purisima Formation. Regionally the alluvial sediments of the Santa Clara Valley are the primary source of ground water in the area. Sixteen of the wells are used for domestic supply or a combination of domestic, agricultural, municipal, and industrial use. Eight wells were installed for agricultural irrigation supply. Use of the remaining nine wells is not documented.

14. Volatile organic compounds have been detected in the ground water to the southwest of the Landfill. Volatile organic compounds concentrations in the ground water from the western fault block were typically lower than those in the central fault block. Since there has been no monitoring of the eastern fault block, volatile organic compounds levels here are undetermined.

15. Since monitoring was instituted at the Landfill (August, 1985), all the wells, including background well E-1, have consistently exceeded MCL's (maximum contaminant levels) for TDS and electric conductivity. Historical concentrations of TDS range from 500 mg/l to 1900mg/l (recommended level is 500 milligrams per liter) and EC range from 800μmhos/cm to 2100μmhos/cm (recommended level is 900μmho/cm). Sodium, potassium, magnesium, and calcium consistently (during three or more consecutive monitorings) were reported above 1 part per million (ppm).

Beneficial Uses

16. The Water Quality Control Plan, Central Coast Basin (Basin Plan), was adopted by the Board on November 17, 1989 and amended February 8, 1994. The State Water Resources Control Board approved the Basin Plan on August 16, 1990 and the Basin Plan amendments on May 18, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State Waters. This Order implements the water quality objectives stated in that Plan.

17. Present and anticipated beneficial uses of the Pajaro River are:

    a. Municipal and Domestic Supply;
    b. Agricultural Supply;
    c. Industrial Service Supply;
    d. Ground Water Recharge;
    e. Water Contact Recreation;
    f. Non-Contact Water Recreation;
    g. Wildlife Habitat;
    h. Cold Freshwater Habitat;
    i. Fish Migration;
    j. Fish Spawning.

18. Present and anticipated beneficial uses of ground water in the vicinity of the Landfill are:

    a. Domestic and Municipal Supply;
    b. Agricultural Supply; and
    c. Industrial Supply.

Landfill Specifics.

19. Refuse is placed in the Landfill using the area fill method in thin layers on a working face no steeper than 2:1. Refuse lifts average 15 feet thick with perimeter slopes at a maximum of 3:1(horizontal to vertical). Modules B, C and D are designated inert fill material (e.g., soil, concrete, etc.) while Module A and Parcel 1 contain nonhazardous municipal solid waste. The total nonhazardous solid waste capacity is 1.7 million cubic yards and the inert waste capacity is approximately 2.9 million cubic yards. With current filling rates (approximately 102,000 cubic yards per year) the remaining solid waste capacity will provide service until approximately June, 2002.

20. The Landfill meets the criteria of the California Code of Regulations as stated in Chapter 15 for classification as a Class III Landfill suitable to receive non-hazardous solid wastes. This Order implements the prescriptive standards and performance goals of Chapter 15, as adopted by the State Water Resources Control Board on October 18, 1984, and as amended on July 1, 1991.

21. Wastes containing greater than one percent (>1%) friable asbestos are classified as hazardous under California Code of Regulations, Title 22. Since such wastes do not pose a threat to water quality, Section 25143.7 of the Health and Safety Code permits its disposal in permitted Landfills, providing waste discharge requirements specifically allow the discharge and the wastes are handled and disposed in accordance with other applicable State and Federal statutes and regulations.

22. The Landfill is included in the Santa Clara County Solid Waste Management Plan. Solid Waste Facilities Permit No. 43-AA-004 has been issued by Santa Clara County.

23. The County of Santa Clara issued a negative declaration for landfill expansion in May, 1984, which states that the project will cause no significant impacts to the water quality.

24. The base lining system for the Module A landfill (Phase I, II, III, and IV) includes a composite liner constructed in accordance with site-specific requirements established in Order No. 90-34. Using 12-inch riser pipes, the leachate collection and removal system for Module A is designed to accommodate 40 times the estimated maximum daily leachate production rate. In adopting Order No. 90-34, the Board found that "...the Discharger's site characterization and proposed liner system design and operation provide equivalent protection against water quality impairment and are consistent with the siting and performance goal...".

25. The Discharger submitted a verification monitoring plan report for the parcel one landfill in October 1991. The Report contained, among other things, proposed corrective action measures and a proposed corrective action monitoring plan. The discharger has implemented measures to control migration of both landfill gas and leachate. The Parcel 1 landfill gas collection and recovery system is under construction and should be complete by December 1994. The gas recovery and control system is designed to recover landfill gas and condensate. The system will be expanded to include the Module A landfill as it becomes developed. Low-permeability cover, designed to minimize leachate generation, has been placed over portions of the unlined Parcel 1 landfill that have reached final grade. The Discharger has also been extracting leachate from the Parcel 1 landfill.

26. Recyclable materials are currently being separated from incoming loads at the Landfill. This is being done as a space conserving measure in order to maximize the life of the Landfill.

27. On July 11, 1994, the Discharger submitted to the Board a preliminary draft closure plan and post closure maintenance plan for the Landfill prepared by EBA Wastechnologies and dated January, 1994. The plan is currently being reviewed by Board staff. Closure should occur in accordance with a Closure Plan approved by the Executive Officer.

Statements of Regulation

28. Due to revisions of Article 5, of Chapter 15, the Discharger submitted a September 1992 proposed monitoring plan. It includes proposals for an improved ground water detection monitoring program, surface and vadose zone monitoring programs and the establishment of a financial assurance instrument to cover all expenses related to future corrective action costs. The Discharger believes this plan is in substantial compliance with Subtitle D requirements.

29. On October 9, 1991, the Environmental Protection Agency (EPA) promulgated regulations pertaining to solid waste disposal facilities known as 40 CFR, Parts 257 and 258 Solid Waste Disposal Facility Criteria, Final Rule (also known as Subtitle D). California has received US EPA authorization (became an "Approved" State) to implement the Federal Subtitle D regulations. The majority of the Subtitle D regulations for most Municipal Solid Waste Landfills became effective and self-implementing on October 9, 1993. The Subtitle D regulations establish minimum criteria for location, design, operation, clean-up, and closure for most Municipal Solid Waste Landfills. Subtitle D implementation/applicability is as follows:

    a. Municipal Solid Waste Landfills with Requirements that stopped receiving waste on or before October 9, 1991 are exempt from Subtitle D except for monitoring requirements and deed restrictions.

    b. Municipal Solid Waste Landfills that receive waste on or after October 9, 1991, but stop prior to October 9, 1993, must meet only the final cover requirements specified in Section 258.60(a).

    c. Municipal Solid Waste Landfills that receive waste on or after October 9, 1993 must comply with all requirements of Subtitle D.

Further, ground water and corrective action requirements become effective October 9, 1994 through October 9, 1996 for existing Landfills and lateral expansions. Federal financial assurance requirements become effective April 9, 1995.

As of October 9, 1993, the Subtitle D regulations have been self-implementing. California has received U.S. EPA authorization (became an "Approved" State) to implement the Federal Subtitle D regulations. All Part 258 requirements are effective, except Subpart G of Part 258 (financial assurance requirement), which becomes effective April 9, 1995

30. Discharge of waste is a privilege, not a right, and authorization to discharge waste is conditioned upon the discharge complying with provisions of Division 7 of the California Water Code and with any more stringent limitations necessary to implement the Basin Plan, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure conditions are met and mitigate any potential changes in water quality due to the project.

31. These Waste Discharge Requirements contain prohibitions, discharge specifications, water quality protection standards, and provisions intended to protect the environment by mitigating or avoiding impacts of the project on water quality. These Waste Discharge Requirements are for an existing facility and are exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Title 14, California Code of Regulations, Chapter 3, Section 15301.

Board Dates

32. On July 20, 1994, the Board notified the Dischargers and interested agencies and persons of its intention to update the Waste Discharge Requirements for the discharge and has provided them with a copy of the proposed order and an opportunity to submit written views and comments.

33. After considering all comments pertaining to this discharge during a public hearing on October 14, 1994 this Order was found consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water Code, the Gilroy Garbage Company, South Valley Refuse Disposal, and Mr. and Mrs. F.L. Furtado, their agents, successors, and assigns may discharge wastes at the Pacheco Pass Class III Landfill, providing compliance is maintained with the following:

Throughout these requirements, footnotes are listed to indicate the source of requirements specified. Requirement footnotes are as follows:

a=CCR, Title 23, Chapter 15
b=Basin Plan
c=CFR, Part 257 and 258 (Subtitle D)
d=California Water Code

Requirements without footnotes are based on professional judgement.

A. DISCHARGE PROHIBITIONS

General Prohibitions

1. Discharge of waste to areas outside the designated disposal area, as specified in Attachment "2", is prohibited. The height of waste shall not exceed that shown in the January 1994 Closure Plan.

2. Discharge of solid wastes within the designated disposal area, where refuse placement has not occurred, is prohibited; unless a composite liner system, as described in Specification B.37, is provided.[c]

3. Discharge of hazardous waste, except for waste that is hazardous due only to its asbestos content, is prohibited. For the purposes of this Order, the term hazardous waste is as defined in Chapter 15.[a]

4. Discharge of designated waste is prohibited except when the discharger demonstrates to the Executive Officer's satisfaction that waste constituents present a lower risk of water quality degradation than indicated by this classification. For the purpose of this order the term "designated waste" is defined in Chapter 15.[a]

5. Discharge of "liquid wastes" or "semi-solid wastes" (i.e., wastes containing less than 50 percent solids by weight), other than leachate and gas condensate as described in **Discharge Specification B.20** and dewatered domestic sludge is prohibited. Exemptions to discharging wastes containing less than 50% solids by weight may be granted by the Executive Officer if the Discharger can demonstrate the discharge will not exceed the moisture-holding capacity of the Landfill, either initially as a result of waste management operations, compaction, and/or settlement.[a]

6. Discharge of dewatered sewage or water treatment sludge, which contains less than 50% solids by weight to any Landfill areas, shall meet conditions identified in **Discharge Specification B.17.**[a]

7. Discharge of waste to ponded water from any source is prohibited.[a]

8. Ponding of liquids over solid wastes is prohibited.[a]

9. Discharge of leachate or gas condensate containing hazardous concentrations of constituents is prohibited.[a]

10. Discharge of wastes that would reduce or impair the integrity of containment structures is prohibited.[a]

11. Discharge of wastes which, if commingled with other wastes in the unit, could produce violent reaction, heat or pressure, fire or explosion, toxic by-products, or reaction products which in turn:

    a. require a higher level of containment than provided by the Landfill,

    b. are restricted hazardous wastes, or

    c. impair the integrity of containment structures,

    is prohibited.[a]

12. Discharge of wastes within five (5) feet of the highest anticipated water table elevation, including the capillary fringe, is prohibited. If excavations encounter ground water or come within five (5) feet of ground water, native soil shall be replaced and compacted to satisfy this specification.[a]

13. Discharge of waste within 50 feet of the property line, 100 feet of surface waters, or 100 feet of domestic water supply wells is prohibited.

14. Discharge of solid or liquid waste or leachate to surface waters, drainageway(s), or ground water, is prohibited.

15. Discharge of solid or liquid waste containing any free liquid or containing moisture in excess of the waste's moisture holding capacity is prohibited. Waste must pass the paint filter test to determine if free liquids are present.[a,d]

16. Discharge of waste solvents, dry cleaning fluids, paint sludge, pesticides, phenols, brine, and acid and alkaline solutions is prohibited.[a]

17. Discharge of oils or other liquid petroleum products is prohibited.

18. Discharge of chemical and biological warfare agents is prohibited.

19. Discharge of leachate or Landfill gas condensate to any Landfill waste management unit is prohibited, unless:

    a. The Landfill gas condensate or leachate is being returned to the Landfill waste management unit that produced it; and

    b. The portion of the Landfill to which these materials are discharged is equipped with a containment system as outlined in **Discharge Specifications B. 37, B. 40, and B. 41**, below.[d]

B. DISCHARGE SPECIFICATIONS

General Specifications

1. The Discharger shall implement the attached Monitoring and Reporting Program (MRP) 94-72 in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the Unit, or any unreasonable impairment of beneficial uses associated with (caused by) discharges of waste to the Unit.[a]

2. Discharge of waste shall not cause the concentration of any Constituent of Concern or Monitoring Parameter to exceed its respective background value in any monitored medium at any monitoring point assigned to Detection Monitoring or at the "Point of Compliance" pursuant to the current version of the MRP.

3. Discharge of waste shall not cause the release of pollutants, or waste constituents in a manner which could cause a condition of pollution or nuisance to occur, as indicated by the most appropriate statistical [or non-statistical] data analysis method and retest method listed in the **MRP, Part III.**[a,d]

4. Discharge of waste shall neither cause nor contribute to the pollution of ground water via the release of waste constituents in either liquid or gaseous phase.

5. Discharge of waste shall neither cause nor contribute to any surface water pollution or nuisance, including, but not limited to:

    a. Floating, suspended, or deposited macroscopic particulate matter or foam;

    b. Increases in bottom deposits or aquatic growth;

    c. An adverse change in temperature, turbidity, or apparent color beyond natural background levels;

    d. The creation or contribution of visible, floating, suspended, or deposited oil or other products of petroleum origin;

    e. The introduction or increase in concentration of toxic or other pollutants/contaminants resulting in unreasonable impairment of beneficial uses of waters of the State.

6. The discharge of waste shall not cause any increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil, or other geologic materials outside of the Landfill if such waste constituents could migrate to waters of the State in either liquid of gaseous phase and cause a condition of pollution or nuisance.

7. With written approval of the Executive Officer, water (including nonhazardous and nondesignated leachate and gas condensate) be used during disposal site operations shall be limited to the minimal amount necessary for dust control, construction (soil compaction), and vegetation establishment/irrigation purposes. The Discharger shall minimize the infiltration of rain-water and prevent infiltration of leachate or gas condensate into areas containing refuse, except as allowed by **Prohibition A.19.**

8. Disposal site operations shall not be a source of odor nuisance.

9. The discharger shall prevent formation of a habitat for carriers of pathogenic microorganisms.

10. The handling and disposal of asbestos containing wastes shall be in accordance with all applicable Federal, State, and local statutes and regulations.

11. Ash wastes may be discharged in the Landfill only when chemical analyses demonstrate to the Executive Officer's satisfaction that the waste is non-hazardous.[a]

12. Wastes discharged in violation of these Requirements and after the adoption date of this Order, shall be removed and relocated.

13. All refuse material that is wind-blown outside the active Landfill area shall be collected regularly and disposed in the Landfill. If wind-clown litter becomes a continuing problem, a containment carrier (additional screens and/or fences) shall be constructed to prevent spreading of refuse.

14. The Discharger shall obtain and maintain a Regional Water Quality Control Board (RWQCB) approved Financial Assurance Instrument (Instrument) to demonstrate financial responsibility for initiating and completing corrective action of all known or reasonably foreseeable releases from the Landfill until the end of the Post-Closure Maintenance Period, pursuant to Chapter 15 regulations. The Instrument shall be legally valid, binding and enforceable under State and Federal law.[a]

15. A program for periodic intake load-checking approved by the Department of Health Services and the Executive Officer shall be maintained to ensure that 'hazardous waste,' 'designated waste' and 'radioactive waste' are not discharged at this Landfill.[a]

16. The Discharger shall operate the Landfill conformance with the most recently Executiv Officer approved Master Plan, Operations Plan, and/or Site Development Plan, except where the Plan(s) conflict with this Order. In the event of conflict, this Order shall govern in cases where it is most restrictive. Any changes to the Plan(s) that may affect compliance with this Order must be approved in writing by the Executive Officer.[a,e]

17. Discharge of dewatered sewage sludge or water treatment sludge to the Landfill shall meet <u>all</u> of the following criteria:

    a. dewatered domestic sludge which is utilized beneficially as soil amendment to promote vegetation over intermediate or final cover may be allowed with written Executive Officer approval.

    b. Sludge discharged into the Landfill shall be <u>only</u> to Units equipped with a dendritic/blanket-type leachate collection and removal system (LCRS) or acceptable equivalent immediately above the liner. However, if the sludge contains greater than 50% solid by weight, an LCRS may not be required depending on site specific conditions and upon Executive Officer approval.

    c. A daily minimum solid waste-to-sludge ratio of 5 to 1 by weight shall be maintained to ensure co-disposal will not exceed the moisture-holding capacity of the nonhazardous solid waste. The actual ratio required by the Regional Board shall be based on site-specific conditions.

    d. Primary and mixtures of primary and secondary sludge shall contain at least 20 percent solids by weight.

    e. Secondary sewage sludge or water treatment sludge shall contain at least 15 percent solids by weight.

18. Waste shall not be discharged to a wetland, as defined in 40 CFR Section 232.2(r), or to any portion thereof, unless the Discharger successfully completes all demonstrations pursuant to 40 CFR Section 258.12(a). Such demonstration is subject to approval of the Executive Officer.[c]

19. Refuse shall be covered daily by at least six inches of cover material. Cover shall promote lateral runoff of rainfall away from the active disposal area. Upon Executive Officer approval, alternative daily cover materials may be utilized.[a,c]

20. Condensate collected from the methane gas recovery operation may be discharged to a Waste Management Unit if the following conditions are met:

    a. the Landfill condensate or leachate shall be returned to the appropriately lined portion of the landfill that produced it. The containment system must meet the performance standard of **Discharge Specifications B.37, B.40, and B.41** of this Order.

    b. condensate shall have no chemical additives which could adversely affect containment features, and shall consist only of water and liquid contaminants removed from the gas recovered at a Waste Management Unit.

    c. condensate is discharged only in compliance with this Order.

Wet Weather

21. By **October 15** of each year, all necessary runoff diversion and erosion prevention measures shall be implemented. All necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion or flooding of the Landfill and to prevent surface drainage from contacting or percolating through wastes.[a]

22. All Landfill surfaces and working faces shall be graded and operated to minimize rainfall infiltration into wastes, to prevent ponding of water, and to resist erosion. Positive drainage to divert rainfall runoff from areas containing waste shall be provided.

23. Drainage ditches crossing over Landfill areas underlain by refuse shall be lined with material which provides an effective field permeability of 1.0×10^{-6} cm/sec or less. If material other than clay or synthetic is used, data must be provided to, and approved by, the Executive Officer. The drainage facilities shall be designed and constructed to accommodate anticipated precipitation and peak surface runoff flows from a 100-year, 24-hour event.

24. Water collected in any storm water catchment Basin or a site water treatment facility may be used in minimum amounts necessary for dust-control, compaction, or irrigation of cover vegetation provided the water is not contaminated and none of the water infiltrates past the root zones of vegetation or past a depth where effective evaporation can occur.

25. Waste containment barriers shall be maintained to ensure effectiveness.[a,c]

26. The Discharger shall monitor potential releases from the site related to surface water runoff by complying with all NPDES Stormwater Monitoring Program requirements.

27. Storage facilities associated with precipitation and drainage control systems shall be emptied following each storm causing significant runoff, or otherwise managed, to maintain the design capacity of the system.[a] Drainage systems shall be constructed to keep Module A stormwater off of Parcel 1 during active filling operations and after final covers are placed.

28. A minimum of two feet of freeboard shall be maintained in all leachate containment ponds. Leachate ponds shall be designed to avoid overtopping as a result of seiches.[a]

29. If adequate soil cover material is not accessible during inclement weather, such material shall be stockpiled during favorable weather to ensure year-round compliance.[a]

30. **Throughout the rainy season of each year,** a minimum one (1) foot thick compacted soil cover designed and constructed to minimize percolation of precipitation through wastes, shall be maintained over the entire active WMU.[c] The soil cover shall be in-place by **October 15 of each year.** The only exception to this specification is the working face. The working face shall be confined to the smallest area practicable based on the anticipated quantity of waste discharged and required waste management facility operations. Landfill areas which have been provided an Executive Officer approved vegetative layer as of the adoption date of this Order, shall not be required to satisfy this requirement. Based on site specific conditions, the Executive Officer may require a thicker soil cover for any portion of the active waste management unit prior to the rainy season.

31. By **October 15, of each year,** vegetation shall be planted and maintained over all Landfill slopes within the entire Landfill area to prevent erosion. Vegetation shall be selected to require a minimum of irrigation and maintenance and shall have a rooting depth not in excess of the vegetative layer thickness. Upon Executive Officer approval, non-hazardous sludge may be conditionally utilized as a soil amendment to promote vegetation. Upon written Executive Officer approval, non-hazardous sludge may be conditionally utilized as a soil amendment to promote vegetation. Soil amendments and fertilizers (including wastewater sludge) used to establish vegetation shall not exceed the vegetation's agronomic rates (i.e., annual nutrient needs), unless approved by the Executive Officer.

32. A complete liquid mass balance shall be performed for all Units and drainage facilities based on Chapter 15 prescriptive design parameters, and shall be submitted to the Board by **September 30, 1995.**

Design Criteria

33. Waste management units, containment structures, and drainage facilities shall be designed, constructed and maintained to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, washout, overtopping, and damage due to natural disasters (e.g., floods with a predicted frequency of once in 100 years, the maximum probable earthquake, and severe wind storms).[a]

34. Waste management units, containment structures and drainage facilities shall be designed and constructed under the direct supervision of a California Registered Civil Engineer or a Certified Engineering Geologist, and shall be certified by that individual as meeting the prescriptive standards and performance goals of all State and Federal Landfill regulations including, but not limited to Chapter 15, Title 14 (of the CCR) and 40 CFR Parts 257 and 258, prior to waste discharge.[a,c]

35. All Landfill facilities shall be designed and constructed to minimize damage during the "Maximum Probable Earthquake" to the graded foundation and to structures which control leachate, surface drainage, erosion, and gas. The operator must demonstrate that all containment structures, including liners, leachate collection and removal systems, and surface water control systems are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator must place the demonstration in the operating record and notify the Executive Officer that it has been placed in the operating record. A landfill slope stability evaluation report shall be submitted to the Executive Officer by **October 14, 1994.**

36. The Discharger shall ensure the integrity of the final slopes which shall be designed for both static and dynamic conditions considering seismic acceleration at least from the Maximum Probable earthquake. The slope of those portions of the fill which will be the final exterior surface shall be developed in accordance with California Code of Regulations, Title 23, Division 3, Chapter 15, Subsection 2581, and the following:

    a. All slopes shall have a minimum of one 15-foot wide bench for every 50 feet of vertical height.

    b. Slopes shall not be steeper than a horizontal to vertical ratio of 1.75:1 (57%).

    c. Slopes steeper than a horizontal to vertical ratio of 3:1 (33%) shall be supported by a slope stability analysis report approved by the Executive Officer.

    d. Slopes with grades less than 3% require the approval of the Executive Officer.[c]

37. Wastes shall not be discharged to areas outside the footprint area which had not received waste as of October 9, 1993, unless the discharge is to an area equipped with a containment system, which meets either **a.** or **b.** below:

    a. A composite liner and a leachate collection and removal system. The liner must consist of two components:

        i. Lower Component: A minimum two-foot layer of compacted soil with a hydraulic conductivity of no more than $1X10^{-7}$ cm/sec (0.1 feet/year); and

        ii. Upper Component: A minimum 40-mil flexible membrane liner (FML) or a minimum 60-mil high density polyethylene (HDPE). The upper component must be installed in direct and uniform contact with the lower component; or

    b. An engineered alternative design. Engineered alternative designs must satisfy the performance criteria in 40 CFR, Section 258.40(a)(1) and (c), and satisfy the criteria for an engineered alternative to the above Prescriptive Design, as provided by Title 23, CCR, Section 2510 (c), where the performance of the alternative composite liners' components, in combination, equal or exceed the waste containment capability of the Prescriptive Design.[c]

38. New waste shall not be placed on existing unlined Parcel 1 wastes without providing a moisture barrier between the old and new wastes. The moisture barrier shall keep rainfall out of that portion of Parcel 1. The proposed moisture barrier shall be employed to serve as a means of diverting leachate from waste placed above the existing unlined Parcel 1 landfill toward the existing leachate collection and removal system.

39. Permeability determinations shall be as specified in Article 4 of Chapter 15. Permeabilities specified for containment structures other than cover shall be relative to the fluids, including waste and leachate, to be contained. Permeabilities specified for cover shall be relative to water. Permeabilities shall be determined primarily by appropriate field test methods in accordance with Civil Engineering practice. Although state of the art practice allows for alternative field permeability test methods, the method used will be subject to Executive Officer review. The results of laboratory tests with both water and leachate, and field tests with water, shall be compared to evaluate how the field permeabilities will be affected by leachate. Appropriate compaction tests may be used in conjunction with laboratory permeability tests to determine field permeabilities as long as a reasonable number of field permeability tests are also conducted.[a]

40. Leachate collection and removal systems shall be installed immediately above the liner and shall be designed, constructed, maintained, and operated to collect and remove twice the maximum anticipated daily volume of leachate from the Unit.[a]

41. The leachate collection and removal system shall:

    a. be designed and constructed to prevent the development of hydraulic head on the liner; and

    b. convey to a sump, or other appropriate collection area, all leachate which reaches the liner. The depth of fluid in any collection sump shall be kept at the minimum needed to ensure efficient pump operation.[a]

    c. All wells within 500 feet of the landfill shall have sanitary seals which meet the requirements of the Santa Clara Valley Water district or shall be properly destroyed. A record of the sealing and/or the destruction of such wells shall be sent to the Board and to the State Department of Water Resources.

Closure

42. Final Landfill configuration shall conform to the contours delineated in the January 1994 Closure Plan by EBA Wastechnologies. Surface drainage from Module A shall not be allowed to flow over the Parcel 1 final cover.

43. Areas at final elevations, according to the January 1994 Closure Plan by ERA Wastechnolgoies, shall be covered with final cover pursuant to Section 2581 of Chapter 15 including from bottom to top:[a]

    a. at least a two foot foundation layer placed over waste;

    b. (1) for Landfills which have not been equipped with a Subtitle D composite liner system, a low permeability geomembrane or compacted clay with an in-place permeability no faster than $1x10^{-6}$ cm/sec, or no faster than the permeability of underlying natural geologic materials, which ever is less.

    (2) for Landfills which have been equipped with a Subtitle D composite liner system, a low permeability geomembrane or compacted clay with an in-place permeability no faster than $1x10^{-7}$ cm/sec, or no faster than the permeability of the underlying Subtitle D composite liner system; and

    c. at least one foot of soil capable of supporting vegetation, resisting erosion, and protecting the underlying low permeability layer.

Hydraulic conductivity of a low-permeability soil layer shall be determined by both laboratory and in-place field testing. Permeability determinations for cover materials shall be as specified in Article 4 of Chapter 15 and shall be appended to the final closure and post-closure maintenance plan. Construction methods and quality assurance procedures shall be submitted for Regional Board review, and shall insure all parts of the low-permeability layer meet the hydraulic conductivity and compaction requirements. The final cover shall be graded to a slope of at least 3%, but not more than 10% unless adequate erosion control measures are implemented and approved by the Executive Officer.

44. All Landfill areas which have not reached final fill elevation, but will remain inactive over one-year, must be provided with an Executive Officer approved long-term intermediate cover. The thickness and permeability of the long-term intermediate cover shall be cased primarily on site specific conditions including, but not limited to length of exposure time; volume of underlying material, permeability, thickness and composition of existing cover; amount of yearly rainfall; depth to ground water; beneficial uses of underlying ground water; site specific geologic and hydrogeologic conditions; and effectiveness of existing monitoring system.

45. The Discharger shall implement final closure activities as the site operation progresses (e.g., within 30 days after a particular Unit or portion of a Unit reaches final fill elevation, final closure activities), in accordance with requirements consistent with the closure of the entire site, as approved by the Executive Officer and the CIWMB in accordance with the most recently approved closure plan.[a]

46. All closed Landfill waste management units shall be provided with at least two permanent monuments, installed by a licensed land surveyor, from which the location and elevation of all wastes, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period. Cumulative waste subsidence and settlement of areas where final cover is installed, shall be documented in the annual report.[a]

47. Partial closure shall be accomplished by implementing closure activities, including but not limited to: placement of final cover, final grading, maintenance, revegetation, and installation of environmental monitoring control systems consistent with the closure of the entire site. Units closed in accordance with a Closure Plan approved by the Executive Officer and the California Integrated Waste Management Board, are not subject to future regulatory changes, unless monitoring data indicate impairment of beneficial uses of ground water.[a]

48. Alternative intermediate and final cover designs may be considered for Executive Officer approval, if such designs provide equivalent reduction in infiltration and protection from wind and water erosion.[a]

49. Methane and other Landfill gases shall be adequately vented, removed from the Landfill, or otherwise controlled, as required, to prevent the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration through the vadose (unsaturated) zone.

Reporting

50. Discharger shall notify Board staff, within 24 hours by telephone and within seven days in writing, of any noncompliance potentially or actually endangering health or the environment. Any noncompliance which threatens the Landfill's containment integrity shall be promptly corrected. Correction schedules are subject to the approval of the Executive Officer, except when delays will threaten the environment and/or the Landfill's integrity (i.e., emergency corrective measures). Corrections initiated prior to Executive Officer approval shall be so stated in the written report. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. This provision includes, but is not limited to:

    a. violation of a discharge prohibition;

    b. violation of any treatment system's discharge limitation;

    c. slope failure; and

    d. leachate seep occurring on, or in proximity to, the Landfill.[a]

51. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule, shall be submitted within 14 days following each scheduled date unless otherwise specified within the Order. If reporting noncompliance, the report shall include a description of the reason, a description and schedule of tasks necessary to achieve compliance, and an estimated date for achieving full compliance. A second report shall be submitted within 14 days of achieving full compliance.

52. Reports shall be submitted in advance of any planned changes in the permitted facility or in an activity which could potentially or actually result in noncompliance.

53. Discharger shall submit a Revised Supplemental Evaluation Monitoring Plan by December 15, 1994 and implement the Executive Officer approved plan by April 15, 1995. The revised plan shall include corrective action measures and proposed wells to supplement and define the lateral and vertical extent of ground water degradation.

54. Discharger shall submit a revised Detection Monitoring Plan by December 15, 1994 and implement the Executive Officer approved Plan by January 15, 1995.

55. Discharger shall submit a Final Corrective Action Plan By May 1, 1995 and implement the Executive Officer approved plan by July 15, 1996.

56. Discharger shall submit a Final Corrective Action Effectiveness Monitoring Plan by May 1, 1996 and implement the Executive Officer approved plan by July 15, 1996.

C. WATER QUALITY PROTECTION STANDARDS

1. **Water Quality Protection Standard (WQPS or Standard).** The five parts of the Water Quality Protection Standard [Standard] are as follows:

   a. **Constituents of Concern**. The list of Constituents of Concern for water-bearing media [i.e., ground water, surface water, and soil pore liquid]; and soil pore gas,include those described in **Parts** I.E.6, of the attached **Monitoring and Reporting Program NO. 94-72.**

   b. **Concentration Limits**. For each Monitoring Point assigned to the Detection Monitoring Program, the Concentration Limit for each Constituent of Concern [or Monitoring Parameter] shall be its background value as obtained during that Reporting Period, as described in **Part** E.1.a. of the attached Monitoring and Reporting Program No. 94-72. This value will be the "threshold background value".

   c. **Monitoring Points and Background Monitoring Points for Detection Monitoring** shall be those listed in **MAP Part** I.E.1. and shown on **Attachment** "A".

   d. **Point of Compliance**. The Point of Compliance is the edge of the Landfill's permitted area (Existing Permit Limits) shown on **Attachment** "A" and extends vertically down through the uppermost aquifer.

   e. **Compliance Period**. The Compliance Period is the number of years equal to the active life of the waste management unit (including any waste management unit activity prior to the adoption of the waste discharge requirements) plus the closure period. The Compliance Period is the minimum period of time during which the Discharger shall conduct a water quality monitoring program subsequent to a release. The duration of the Compliance Period is until it can be shown that there is no longer a threat to water quality. Each time the Standard is broken (i.e., a release is discovered), the Unit begins a Compliance Period on the date the Board directs the Discharger to begin an Evaluation Monitoring Program. If the Discharger's Corrective Action Program (CAP) has not achieved compliance with the Standard by the scheduled end of the Compliance Period, the Compliance Period is automatically extended until the Unit has been in continuous compliance for at least three consecutive years.

2. **Monitoring Parameters for Detection Monitoring**.

   a. The Detection Monitoring Parameters for (ground water, surface water, perched zone, or soil-pore liquid) samples; and volatile organic compounds$_{water}$, a composite parameter that encompasses a variety of constituents (volatile organic compounds), include those listed in Monitoring and Reporting Program Part I.E.3..

   b. The Detection Monitoring Parameters for soil pore gas samples; and volatile organic compounds$_{spg}$, a composite parameter that encompasses a variety of gaseous-phase volatile organic compounds include those listed in Monitoring and Reporting Program Part I.E.3.

3. **Additional Monitoring Points or Background Monitoring Points.** By December 31, 1995 the Discharger shall, install any additional ground water, soil pore liquid, soil pore gas, or leachate monitoring devices required to fulfill the terms of any Discharge Monitoring Program issued by the Executive Officer.

4. **Additional Requirements**

   a. The concentrations of indicator parameters or waste constituents in water passing through the "Detection" Points of Compliance shall not exceed the Water Quality Protection Standard(s)" established pursuant to Monitoring and Reporting Program No. 94-72, which is attached and made part of this Order.

   b. Discharge of waste shall not cause a "statistically significant" increase over background for any of the constituents of concern or monitoring parameters listed in Appendix I and II of Subtitle D.

   c. Discharge of waste shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board.

   d. Discharge of waste shall not cause concentrations of chemicals and radionuclides in underlying and downgradient ground water to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the code.

   e. Discharge of waste shall not adversely impact the quality of water in any aquifer.

   f. Discharge of waste shall not cause ground water in downgradient wells to exceed the State Department of Health Services latest recommended Drinking Water Action Levels or Maximum Contaminant Levels.

D. PROVISIONS

General Provisions

1. Order No. 90-34 "Waste Discharge Requirements for Pacheco Pass Class III Landfill," adopted by the Board on February 16, 1990, is hereby rescinded.

2. The Discharger shall comply with "Monitoring and Reporting Program No. 94-72", as specified by the Executive Officer.

3. The Discharger shall maintain a copy of this Order at the facility and make it available at all times to regulatory agency personnel and to facility operating personnel, who shall be familiar with its contents.

4. The Discharger shall comply with all other applicable provisions of Chapter 15 and Subtitle D that are not specifically referred to in WDR Order. 94-72 If any applicable regulation requirements overlap or conflict in any manner, the most restrictive requirement shall govern in all cases, unless specifically stated otherwise in this Order, or as directed by the Executive Officer.

5. The Discharger shall maintain legible records of the volume and type of each waste discharged at each Unit and the manner and location of discharge. Such records shall be maintained at the facility until the beginning of the post-closure maintenance period. These records shall be available for review by representatives of the Board and of the State Water Resources Control Board at any time during normal business hours. At the beginning of the post-closure maintenance period, copies of these records shall be sent to the Regional Board.[a]

6. The Discharger shall be responsible for accurate waste characterization, including determinations of whether or not wastes will be compatible with containment features or other wastes and whether or not wastes are required to be managed as hazardous wastes.[a]

7. A list of the general types of the more widely used names of hazardous-type wastes prohibited at this site shall be posted on a legible roadway sign at the entrance in both English and Spanish. The sign shall also state the locations of the nearest hazardous waste disposal sites and shall list penalties for illegal dumping. A specific list of Hazardous Wastes and other types of materials prohibited at this Landfill shall be provided to commercial waste haulers that use this Landfill and shall be available to all other site users upon request.

8. The Regional Board considers the property owner and Discharger to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge.

9. The landowner and the Discharger shall have a continuing responsibility to assure protection of usable waters, from discharged wastes and from gases and leachate generated by discharged waste, during the Landfills active life, closure, and post-closure maintenance periods and during subsequent use of the property for other purposes.

10. The Discharger or persons employed by the Discharger shall comply with all notice and reporting requirements of the State Department of Water Resources with regard to the construction, alteration, destruction, or abandonment of all monitoring wells used for compliance with this Order or with Monitoring and Reporting Program No. 90-72, as required by Sections 13750 through 13755 of the California Water Code.[c]

11. The Discharger shall notify the Board in writing of any proposed change in ownership or responsibility for construction or operation of the facility. This notification shall be given at least 90 days prior to the effective date of the change and shall be accompanied by an amended Report of Waste Discharge and any technical documents that are needed to demonstrate continued compliance with these WDRs. In the event of any change in ownership of this waste management facility, the Discharger shall notify the succeeding owner or operator, in writing, of the existence of this Order. A copy of that notification shall be sent to the Board. Notification to the Board shall also comply with Section 2590(c) of Chapter 15.[a]

12. To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Board, and a statement indicating that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a violation of Section 13264 of the Water Code (discharge without waste discharge requirements). Transfer may be approved or disapproved in writing by the Executive Officer.[c]

13. Within 60 days after completing final closure of all MSW landfill Units,

    a. the owner or operator must record a notation on the deed to the Landfill facility property, or some other instrument that is normally examined during title search, and notify the Executive Officer that the notation has been recorded and a copy has been placed in the operating record.

    b. the notation on the deed must in perpetuity notify any potential purchaser of the property that:.

        i. the land has been used as a Landfill facility; and

        ii. its use is restricted pursuant to Subtitle D, section 258.61(c)(3).

    c. Pursuant to Chapter 15, should the Discharger default in post-closure care, liability shifts to the new owner/operator.[a,c]

14. The Discharger shall submit to the Regional Board and the California Integrated Waste Management Board (CIWMB) for approval an updated closure and post-closure maintenance plan (Closure Plan) by **October 1, 1995**. The Closure Plan shall describe the methods and controls to be used to assure protection of the quality of surface and ground waters of the area during partial and final closure operations and during any proposed subsequent use of the land. The Closure Plan must include:

    a. a description of the final cover, designed in accordance with all applicable State and Federal regulations and the methods and procedures to be used to install the cover;

    b. an estimate of the largest area of the MSW Landfill Unit ever requiring a final cover at any time during the active life;

    c. an estimate of the maximum inventory of wastes ever on-site over the active life of the Landfill facility;

    d. a schedule for completing all activities necessary to satisfy all closure criteria as required by Chapter 15, Title 14, and Subtitle D regulations;

    e. an estimate of closure and post closure maintenance costs;

    f. a proposal for a trust fund or equivalent financial arrangement to provide sufficient funding for closure and post-closure maintenance; and

    g. the amount to be deposited in the trust fund or equivalent financial arrangement each year so adequate funding exists to complete closure at the time closure is required.

    The Closure Plan shall be prepared by or under the supervision of a California Registered Civil Engineer or Certified Engineering Geologist. Updates of the plan are required whenever substantial changes occur or five years has elapsed since the last major revision. The method, identified for each Units' closure and protection of the quality of surface and ground waters, shall comply with Waste Discharge Requirements established by the Regional Board. The Closure Plan report shall be consistent with all applicable State and Federal regulations, including Chapter 15 and Subtitle D.[a,c]

15. The Discharger shall notify the Board at least 180 days prior to beginning any partial or final Landfill closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved Closure Plan and that the Plan provides for closure in compliance with all applicable state and federal regulations. If there is no approved Closure Plan, the Discharger must submit a complete Closure Plan at least 240 days prior to beginning any Landfill closure activities.[a]

16. The Executive Officer may require partial and/or final closure of any waste management unit regardless of whether such waste management unit has reached final capacity laterally and/or vertically for the protection of water quality. Such a requirement will be requested in writing.[a]

17. The Discharger shall report all changes in usage of daily cover and performance standards within 10 days following the change.

18. The Discharger shall maintain waste containment facilities and precipitation and drainage controls, and shall continue to monitor, as appropriate, ground water, leachate from the Unit, the vadose zone, and surface waters per the current version of the MAP throughout the post-closure maintenance period.[a]

19. The post-closure maintenance period shall continue until the Regional Board determines that remaining wastes in the Landfill will not threaten water quality.[a]

20. Discharger shall immediately notify the Regional Board of any flooding, equipment failure, slope failure, or other change in site conditions which could impair the integrity of waste containment facilities or of precipitation and drainage control structures.

21. At any time, the Discharger may file a written request (including appropriate supporting documents) with the Regional Board Executive Officer, proposing appropriate modifications to the Monitoring and Reporting Program. The request may address changes (a) to any statistical method, non-statistical method, or retest method used with a given constituent or parameter, (c) to the manner of determining the background value for a constituent or parameter, (c) to the method for displaying annual data plots, (d) to the laboratory analytical method used to test for a given constituent or parameter. (e) to the media being monitored [e.g., the addition of soil pore gas to the media being monitored], (f) to the number or placement of Monitoring Points or Background Monitoring Points for a given monitored medium, or (g) to any aspect of monitoring or QA/QC. After receiving and analyzing such a report, the Executive officer either shall reject the proposal for reasons listed, or shall incorporate it, along with any necessary changes, into the attached Monitoring and Reporting Program. The Discharger shall implement any changes in the Monitoring and Reporting Program proposed by the Regional Board Executive Officer upon receipt of a revised Monitoring and Reporting Program.

22. Vertical expansions (i.e., additional refuse placement on top of existing unlined waste management units already containing refuse) above currently permitted final fill elevations in accordance with the January 1994 Closure Plan or WDRs, shall not be permitted, unless The Discharger submits and the Executive Officer approves, a proposal demonstrating that additional refuse placed on top of existing unlined waste management units does not significantly increase the threat to water quality. The proposal shall adequately address:

    a. all siting criteria and engineering properties of underlying refuse,

    b. differential settlement, including the ability of the underlying waste to support the additional refuse and all effects of the additional refuse upon the underlying refuse.

    All proposal conclusions shall consider site specific conditions, including subsurface hydrogeologic factors, existing threat to water quality, any existing State Water's degradation as a result of waste management unit waste discharges, beneficial uses of underlying and adjacent waters, size of the existing waste management unit, remaining capacity, existing and proposed final fill elevations, financial feasibility, and any other relevant factors.

23. Pursuant to the California Code of Regulations, Title 23, Chapter 15, Article 9, the Discharger shall submit a technical report to the Executive Officer not later than March 30, 1999 from adoption of this Order, which:

    a. discusses whether there has been or will be changes in the continuity, character, location, or volume of the discharge;

b. discusses any proposed expansions (lateral and/or vertical expansions within and/or outside currently permitted Landfill boundaries) or closure plans, including detailed information of the quality and quantity of waste discharged and the anticipated impact upon water quality and Landfill operations;

c. discusses whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision;

d. addresses all other applicable sections of Article 9, Chapter 15 (e.g., update of the Landfill's Development and Operations Plan, etc.,); and

e. includes any other technical documents needed to demonstrate continued compliance with this Order and all pertinent state and federal requirements.[a]

24. Prior to February 1, 1995, the Discharger shall submit a technical report addressing compliance with all terms of this Order. The report shall include an implementation schedule for all work required by this Order.

25. Except for data determined to be confidential under Section 13267 (c) of the California Water Code, all reports prepared in accordance with this Order shall be available for public inspection at the office of the Regional Board.[d]

26. All reports shall be signed as follows:

a. for a corporation: by a principal executive officer of at least the level of vice president;

b. for a partnership or sole proprietorship: by a general partner or the proprietor, respectively;

c. for a public agency: by either a principal executive officer or ranking elected official or, their "duly authorized representative":

d. engineering reports: by a California Registered Civil Engineer or Certified Engineering Geologist.

27. Any person signing a report makes the following certification, whether its expressed or implied:

"I certify under penalty of perjury I have personally examined and am familiar with the information submitted in this document and all attachments and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

28. The Board will review this Order periodically and may revise these requirements when necessary.

29. The Discharger shall submit an updated/revised version of its Operations Plan by January 15, 1995. The Master Plan must include detailed information regarding regulatory considerations; design, construction and operating provisions; environmental monitoring; and closure and postclosure. Additionally, the Master Plan shall:[a]

a. include a Fill Sequencing Plan, including detailed maps. The Fill Sequencing Plan should describe in detail the overall development of the entire Landfill.

b. include a detailed description of the lateral and vertical extent of refuse within all existing Modules. It must include an accurate estimate of waste volumes within each existing Landfill module and an approximation of the remaining volume and years of capacity for each existing module and all new proposed modules within currently permitted Landfill boundaries. It must also describe all existing available space within currently permitted Landfill areas (i.e., modules where refuse has been

placed in the past, but have not reached final permitted elevation and modules or portions of modules where refuse has never been placed).

c. discuss any plans/proposals to close or partially close any modules or portions of modules, any proposed liner systems and respective design components, any proposed plans for long-term intermediate cover for Landfill areas which may remain inactive for long periods of time.

30. The Discharger shall develop a Final cover design for all Landfill areas. Cover designs shall minimize percolation from precipitation and surface water flows. The proposed design shall be submitted by March 1, 1995, for Executive Officer approval. Executive Officer approval of the design will be based on site specific factors as described in **Discharge Specification B.43.**

31. The Discharger must submit a 'Wet Weather Preparedness Report' by **November 1, of each year.** The report must address, in detail, compliance with all wet weather preparedness related specifications (e.g., **Discharge Specifications B.21, B.22, B.23, B.29, B.30, and B.31**) of this Order, and all other relevant Chapter 15 and Subtitle D criteria.

32. If the Discharger or the Regional Board determines, pursuant to Section 2550.8(g) or (i), that there is evidence of a new release from any portion of the Landfill, the Discharger shall immediately implement the procedures outlined in Monitoring and Reporting Program, Part **IV.C.**

33. The Discharger shall implement the Revised Detection Monitoring plan (submitted by Emcon in September 1992) by **October 14, 1994**. This includes the addition of 4 new wells in the Eastern Fault Block.

34. The Discharger shall develop a Revised Enhanced Monitoring plan covering Detection, Evaluation and Corrective Action Evaluation monitoring by December 15, 1995. The plan shall include full delineation of the plumes Vertical and Horizontal extent, a Subtitle D and Article 5 compliance Detection Monitoring Program and an adequate Corrective Action Effectiveness Program. The Executive Officer approved Revised Enhanced Monitoring Plan shall be implemented by **January 15, 1995**.

35. The Discharger shall submit to the Executive Officer for review and approval a periodic load-checking program. The load checking program shall be adequately designed to ensure that "hazardous wastes" and "unauthorized designated wastes" are not discharged to the Waste Management Unit. The load checking program shall be submitted by **December 1, 1994**. The program shall include, but not be limited to:[a]

a. Number of random loads to be checked per month and/or year.

b. Training program for on-site personnel.

c. Record keeping and reporting program.

d. Program implementation schedule.

e. Alternatives for waste found to not be in compliance with these waste discharge requirements.

f. Example of signs posted at the facility.

36. By **October 14, 1994** the Discharger shall submit a signed original Financial Assurance Instrument for corrective actions , as described in **Provision No. 37** below, for Executive Officer review and approval.

37. The Pacheco Pass Class III (i.e., by adoption of a Resolution) shall appropriate $1,358,000 to a Financial Assurance Instrument (Instrument) to cover the estimated Article 5 costs to initiate and complete corrective action of the "worse case" reasonably foreseeable release. The total appropriated amount is provided in the "Proposed Detection Monitoring Program" section which is presented in the support document for the September 1992 Report Of Waste Discharge. The total cost should include corrective action costs; evaluation monitoring program costs; and annual testing, operation and maintenance costs. The Discharger shall submit a report every five years that either validates the Instrument's ongoing viability or proposes and substantiates any needed changes starting January 30, 1999.[a,d]

38. Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (c) of section 13267 of the California Water Code, or falsifying any information provided therein, is guilty of a misdemeanor.[d]

39. The discharger and/or any person who violates waste discharge requirement and/or who intentionally or negligently discharges waste, causes or permits waste to be deposited where it is discharged to waters of the state, may be liable for civil and/or criminal remedies, as appropriate, pursuant to the California Water Code.[d]

40. For the purposes of this Order, the interested agencies, in addition to this Board, which should be submitted copies of the reports, data, and correspondence generated in compliance with this order, shall include:

Seena Hoose
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

Bob Anderson
CA Integrated Waste Mgmt. Board
8800 Cal Center Drive
Sacramento, CA 95826

41. The Discharger shall comply with the following submittal and implementation schedule for all tasks and/or reports required by this order:

REPORT AND IMPLEMENTATION DATE SUMMARY

TASK	IMPLEMENTATION DATE
Runoff diversion and erosion prevention [Discharge Specification No.21]	October 15, of each year
Minimum One foot cover over entire active waste management unit [Discharge Specification No.30]	October 15, of each year
Vegetation placement over entire Landfill area [Discharge Specification No.31]	October 15, of each year
REPORT	**DUE DATE**
Wet-weather Preparedness Report [Provision No.31]	November 1 each Year
Financial Assurance Report [Provision No.36 & 37]	October 14, 1994 yearly updates due every five years starting January 30, 1999
Final Cover Design Report [Provision No.30]	March 1, 1995
Implement Existing Detection Monitoring Program [Provision No.33]	October 14, 1994
Submit Revised Detection Monitoring Plan [Provision No.34]	December 15, 1994
Implement approved Revised Detection Monitoring Plan [Provision No.34]	January 15, 1995
Technical Compliance Report [Provision No.24]	February 1, 1995
Load Checking Program [Provision No.35]	December 1, 1994
Liquid Mass Balance Report [Specification No.32]	October 1, 1995
Updated Closure Plan [Provision No.14]	October 1, 1995 yearly updates due January 30 beginning in 1997
Slope Stability Report [Discharge Specification No.36]	October 14, 1994
Supplemental Evaluation Monitoring Plan [Discharge Specification No.53]	December 15, 1994
Implement Evaluation Monitoring Plan [Discharge Specification No.53]	April 15, 1994

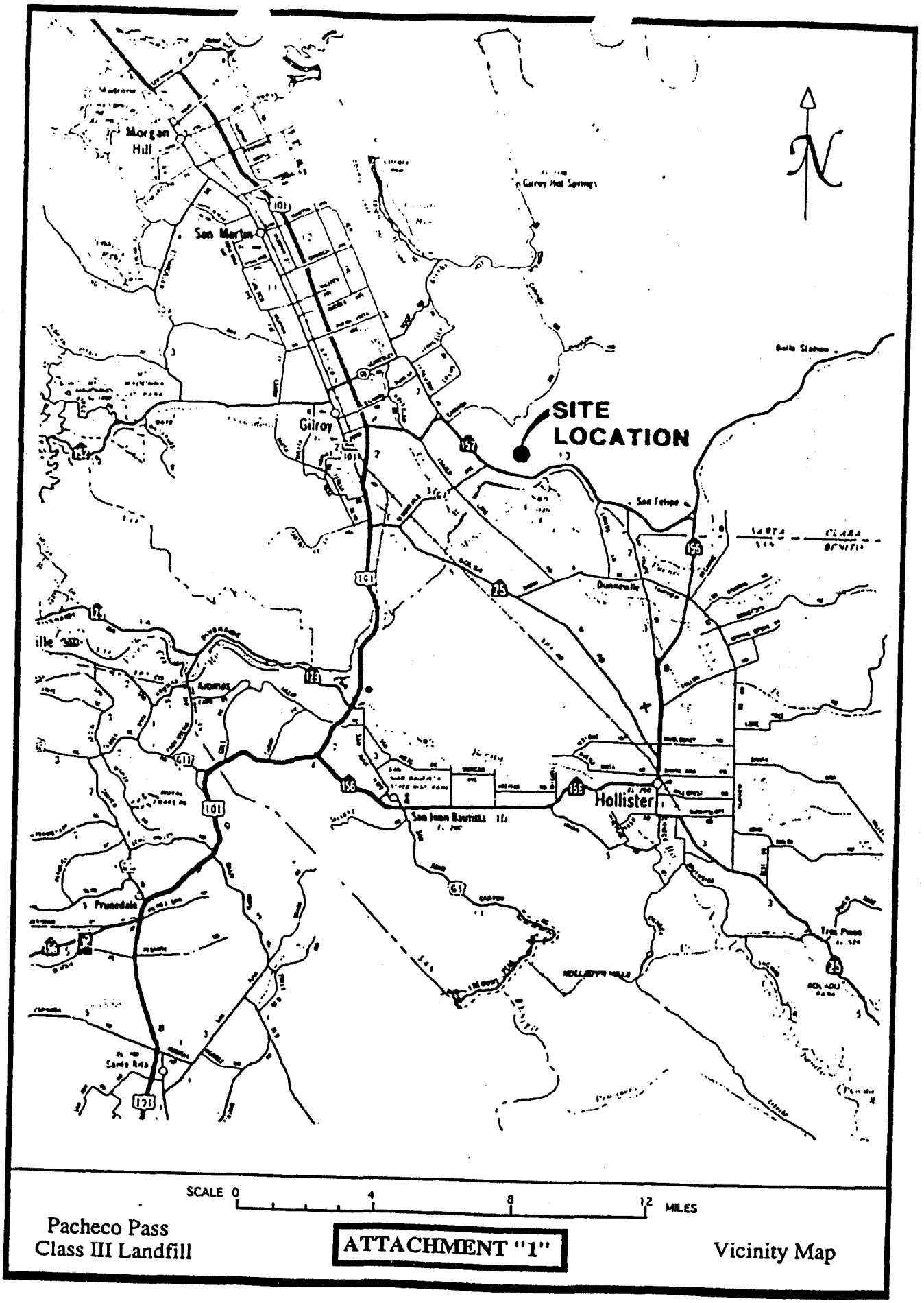
Revised Detection Monitoring Plan [Specification No.54]	December 15, 1994
Implement Approved Revised Detection Monitoring Plan [Discharge Specification No.54]	January 15, 1995
Submit Final Corrective Action Plan [Discharge Specification No. 55]	May 1, 1996
Submit Final Corrective Action Effectiveness Monitoring Plan [Discharge Specification No.56]	May 1, 1996
Implement Revised Corrective Action Plan [Discharge Specification No. 55]	April 15, 1995
Implement Approved Revised Corrective Action Effectiveness Monitoring Plan [Discharge Specification No.56]	July 15, 1996
Technical Report [Provision No. 23]	March 30, 1999
Updated/Revised Operations Plan [Provision No. 29]	January 15, 1995

I, ROGER W. BRIGGS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on October 14, 1994.

Paul Jagger
for EXECUTIVE OFFICER

10/18/94
Date

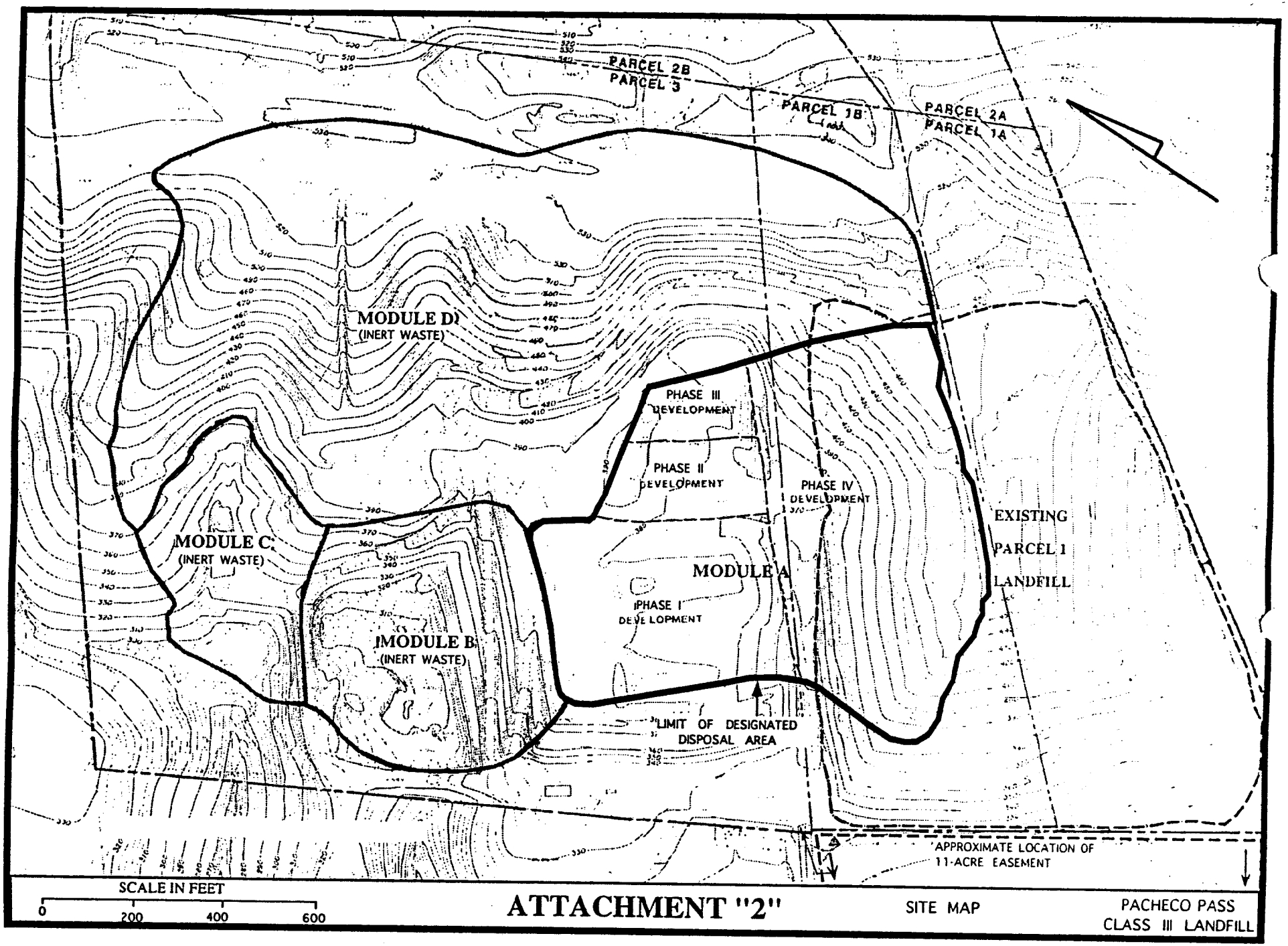
SAP2/pachec2.wdr

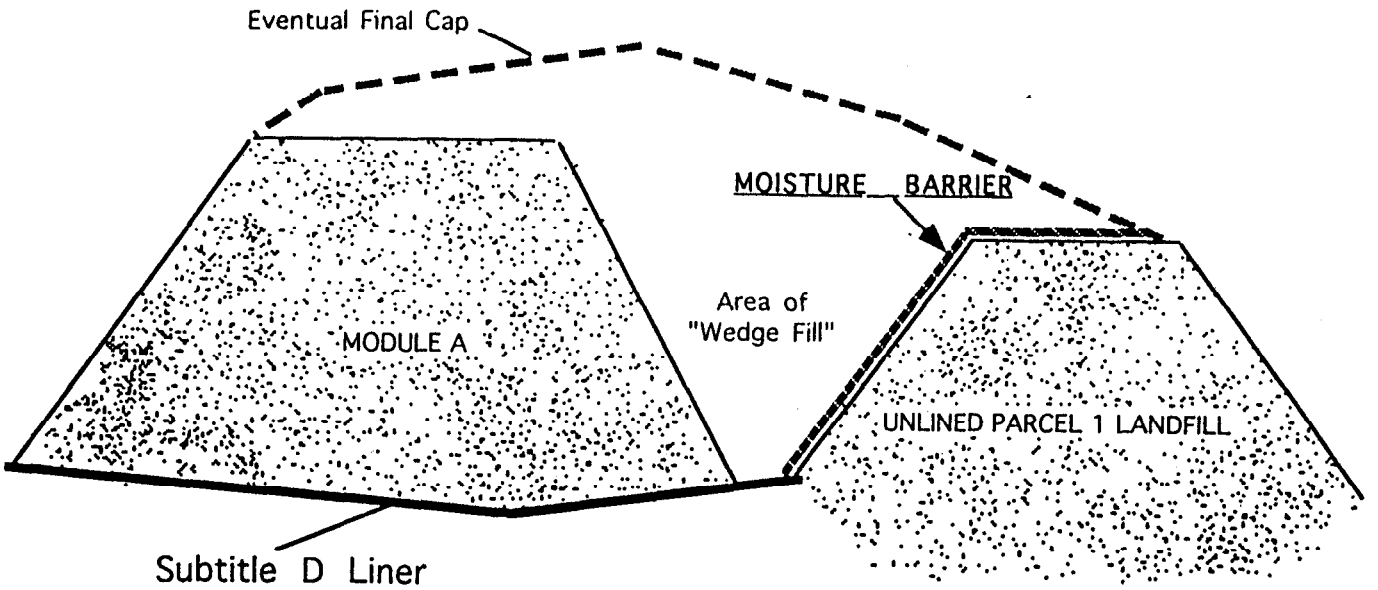


Pacheco Pass
Class III Landfill

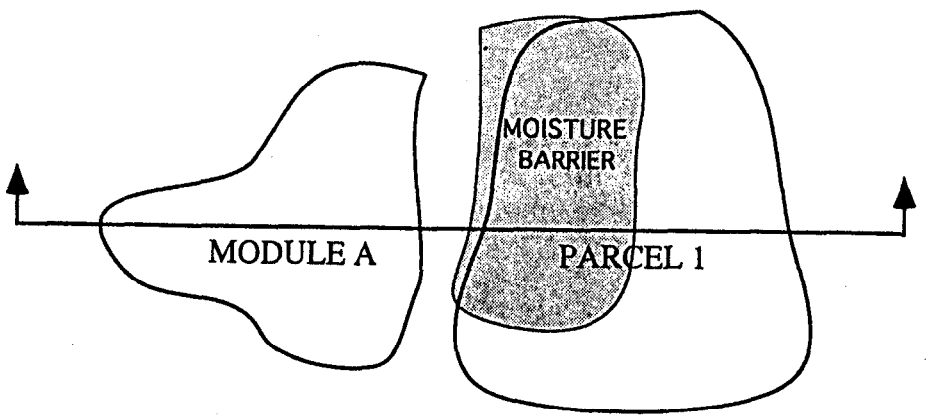
ATTACHMENT "1"

Vicinity Map


PARCEL 2B
PARCEL 3
PARCEL 1B
PARCEL 2A
PARCEL 1A
MODULE D
(INERT WASTE)
PHASE III
DEVELOPMENT
PHASE II
DEVELOPMENT
PHASE IV
DEVELOPMENT
EXISTING
PARCEL 1
LANDFILL
MODULE C
(INERT WASTE)
MODULE A
PHASE I
DEVELOPMENT
MODULE B
(INERT WASTE)
LIMIT OF DESIGNATED
DISPOSAL AREA
APPROXIMATE LOCATION OF
11-ACRE EASEMENT
SCALE IN FEET
0
200
400
600
ATTACHMENT "2"
SITE MAP
PACHECO PASS
CLASS III LANDFILL



CROSS SECTION



PLAN VIEW

CONCEPTUAL DIAGRAM
NOT TO SCALE

ATTACHMENT 3

CROSS SECTION VIEW OF MOISTURE BARRIER